

**SYSTEM ON A CHIP HAVING A NON-VOLATILE IMPERFECT  
MEMORY**

**Abstract of the Disclosure**

A system-on-a-chip is described herein. The system-on-a-chip includes a microprocessor, a non-volatile imperfect semiconductor memory device and a memory controller. The memory controller is configured to transfer device data between the microprocessor and the non-volatile semiconductor imperfect memory device.